



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/419,523	10/18/1999	PAUL PETERSEN	MICE-0051-US	1377

7590 10/28/2002

COE F MILES
TROP PRUNER HU & MILE PC
8554 KATY FREEWAY
SUITE 100
HOUSTON, TX 77024

EXAMINER

CHACE, CHRISTIAN

ART UNIT PAPER NUMBER

2187

DATE MAILED: 10/28/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

84

Office Action Summary	Application No.	Applicant(s)	
	09/419,523	PETERSEN, PAUL	
	Examiner	Art Unit	
	Christian P. Chace	2187	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 September 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-40 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
 If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
 a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

This Office action has been issued in response to amendment filed 27 September 2002. Applicant's arguments have been carefully and respectfully considered, but they are not persuasive. Claims 1-40 are now pending. New grounds for rejection of claims 1-40 have been established, as necessitated by amendment. Accordingly, this action has been made FINAL, as necessitated by amendment.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-2, 5, 8-9, 11-13, 16-22, 25, 28-29, 31-33, and 36-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Arai (US Patent # 5,280,599) and Yoshizawa et al (US Patent # 5,787,464).

With respect to claims 1, 12, 18, 21, 32, and 38, examiner notes that the definition of "memory configuration information," in page 5 of the instant specification and shown in figure 3, is defined as, "type, amount, and operating characteristics of memory." "Residual memory capacity" is defined as the difference between existing memory and maximum possible memory expansion. Obtaining memory configuration information of a computer system, or, the actual memory of the system, determining a memory capacity of the system, or, the possible memory allowed in the system, and

determining memory upgrade options based on a residual memory capacity of the computer system is disclosed in column 2, lines 46-60. Examiner notes that "upgrade options" and "memory characteristics" are very broad in scope, and have been interpreted as such by examiner. The difference between the claims and Arai is the explicit recitation of expanding/replacing the number of memory devices. Yoshizawa et al disclose expanding and replacing the number of memory devices in the abstract. Accordingly, it would have been obvious to one of ordinary skill in the art at the time of the invention, having the teachings of Arai and Yoshizawa et al before him/her, to utilize the expansion/replacement of Yoshizawa et al in the system of Arai as it allows for on-line expansion and replacement of memory modules, as disclosed by Yoshizawa et al in the abstract.

With respect to claims 2, 13, 19, 22, 33, and 39, the act of obtaining memory configuration information comprising obtaining an indication of an installed system memory amount is disclosed by Arai in column 2, lines 46-60.

With respect to claims 5, 16, 23, and 36, the act of obtaining memory configuration information comprising accessing a non-volatile storage device is disclosed by Arai in figure 3 as ROM/BIOS, and further discussed in column 3, lines 53-59.

With respect to claims 8-9, 17, 20, 28-29, 37, and 40, obtaining the maximum number of memory devices and maximum amount of memory for the computer system are inherent, as the number of address bits, according to the binary number system upon which computers operate, indicate the "amount of memory" which includes the

number of "devices." As evidence of inherency, examiner urges applicant to review Dresser et al (discussed below) in column 4, line 66 into column 5, line 1.

With respect to claims 11 and 31, providing memory upgrade options to a user is disclosed in column 6, line 45, which discusses a "window" for such information.

Examiner notes that the same obviousness statement and motivation is applicable to all claims noted supra as stated supra with respect to the claims upon which they depend.

Claims 3, 14, 15, 23, 34, and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Arai, Yoshizawa et al, and Helm et al (US Pat. # 5,129,069).

With respect to claims 3, 14, and 15, Arai and Yoshizawa et al disclose the claimed invention upon which the instant claims depend. The difference between the instant claim and Arai and Yoshizawa et al is that Arai and Yoshizawa et al, although disclosing a memory amount as shown supra, do not specifically disclose the configuration information comprising a number of memory module sockets. Helm et al, however, disclose memory module "slots," which examiner interprets as "sockets," in figure 1. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, having the teachings of Arai, Yoshizawa et al, and Helm et al before him/her, to obtain the "memory amount" disclosed by Arai and Yoshizawa, based on the number of "sockets" as disclosed in Helm et al, because, as discussed supra with respect to claims 8-9, 17, and 20, the amount of memory in or available to the system is inherently dependent upon the number of address bits used in the system.

Claims 4 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Arai, Yoshizawa et al, and Cowell (US Pat. # 5,860,134).

Arai discloses the claimed invention upon which the instant claims depend. The difference between the instant claim and Arai and Yoshizawa et al is that the memory configuration information comprises an operating speed of the installed system memory. However, Cowell discloses a "type detection," which includes system bus speeds, in column 8, line 35 into column 9, line 35. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, having the teachings of Arai, Yoshizawa et al, and Cowell before him/her, to utilize the type detection of Cowell in the system of Arai and Yoshizawa et al because the type detection signal allows the system to coordinate memory speeds according to the first and second type signals, as disclosed by Cowell, in column 9, lines 34-36, which increase the flexibility of the system, as made hackneyed in the state of the art.

Claims 6, 7, 10, 26, 27, and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Arai, Yoshizawa et al, and Dresser et al (US Pat. # 5,446,860).

With respect to claims 6, 7, 10, 26, 27, and 30, Arai and Yoshizawa et al disclose the claimed invention upon which the instant claims depend. The difference between the instant claims and Arai and Yoshizawa et al is that the act of accessing a non-volatile storage device comprises accessing a serial presence detect device. The system of Arai and Yoshizawa et al operates serially. If a program to detect presence of a device is stored in ROM, as it is in BIOS, then it is, technically, a serial presence detect device. However, assuming *arguendo*, that the above is not the case, Dresser et

Art Unit: 2187

al disclose serial presence detect data in figure 4. Inherently, if there is serial presence detect data, there is a serial presence detect device to obtain said data, as computers need to be told what to do, so to speak. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, having the teachings of Arai, Yoshizawa et al, and Dresser et al before him/her, to use the serial presence detect device to detect the serial presence of devices in the Arai and Yoshizawa et al system using the device of Dresser et al, because in search for the maximum amount of memory, the presence detect bits denote the maximum amount of memory, as disclosed by Dresser et al in column 4, lines 65-68. Examiner notes that SIMMs, as explicitly disclosed in Dresser et al, are dynamic random access memory devices and are inherently plugged into "slots," by definition. Applicant is invited to see figure 3 of Dresser et al and column 4, line 65 into column 6, line 65 for further discussion of same.

Response to Arguments

Applicant's arguments have been rendered moot in light of new grounds for rejection as necessitated by amendment. Applicant is, however, strongly encouraged to review the cited prior art of record and further distinguish the claimed invention from that of said prior art of record.

Conclusion


Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christian P. Chace whose telephone number is 703.306.5903. The examiner can normally be reached on 9-4-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Do Yoo can be reached on 703.308.4908. The fax phone numbers for the organization where this application or proceeding is assigned are 703.305.3719 for regular communications and 703.305.3719 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703.305.3900.

Christian P. Chace 
DY/cpc
October 21, 2002


DO HYUN YOO
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100